
CHAPTER 14: TRAINING (TRN)

Chapter Table of Contents

1	EMPLOYEE ORIENTATION	TRN 14-1
	Orientation Topics	TRN 14-1
2	GUIDANCE ON TRAINING PROGRAMS	TRN 14-2
	Systematic Approach to Training	TRN 14-2
	Types of Training	TRN 14-4
	Teaching Principles	TRN 14-4
	One-on-one Training	TRN 14-5
3	RECORDKEEPING SYSTEM FOR TRACKING EMPLOYEE TRAINING	TRN 14-5
	Training Records	TRN 14-6
4	SAFETY TRAINING REQUIREMENTS	TRN 14-6
	General Safety Training	TRN 14-6
	Individual Development Plan	TRN 14-8
5	PROFESSIONAL QUALIFICATION AND CERTIFICATION	TRN 14-9
	Table 1: Professional Certifications	TRN 14-10
APPENDICES		
	Appendix 14-1: Sources of Training	TRN 14-13

CHAPTER 14: TRAINING

1. EMPLOYEE ORIENTATION

An orientation program should be available to each new employee. This is true for all employment levels—management, supervisory, or worker. New employees are usually open to ideas and information about the way business is done. From the first day, new employees begin to formulate opinions about the organization, managers, supervisors, and fellow workers.

Instruction timeliness is a key issue in the orientation of new employees. Managers must be aware of an organization's policies and mission statements concerning worker safety and health prior to making decisions that affect work processes. Similarly, new workers must have an early understanding of the organization's safety and health policies and procedures that safeguard them in the performance of their assigned tasks.

**Orientation
Topics**

The list of topics chosen for an employee orientation program largely depends on the audience. Subjects will vary if an organization provides separate orientation classes for managers and workers. However, most programs should include the following topics, as applicable:

- organized labor agreements
- safety and health policy statement
- acceptable dress code
- housekeeping standards
- hazard communications
- PPE
- emergency response procedures, such as fire and spill
- accident reporting procedures
- near-miss accident reporting
- accident investigation (supervision)
- lockout/tagout procedures
- machine guarding
- electrical safety awareness
- ladder use and storage
- confined space entry
- medical facility support
- first aid and cardiopulmonary resuscitation
- hand tool safety
- ergonomic principles
- eye wash and shower locations
- fire prevention and protection

CHAPTER 14: TRAINING

- access to exposure and medical records

Note: Many of the above topics should be provided as hands-on training prior to actual work exposure.

2. GUIDANCE ON TRAINING PROGRAMS

The goal of an OSH training program is providing a trained workforce to operate DOE facilities in a safe and healthful manner. Training can range from formal classroom training to simple one-on-one instruction between a worker and a supervisor.

Note: Sources of training can be found in **Appendix 14-1**.

It is important to note that the success of an OSH training program is based on management's visible commitment to the program and the degree to which employees are involved in training program design and presentation.

Note: Training is most effective when integrated into overall job performance training.

This section describes the following necessary components of a training program:

- systematic approach to training
- training requirements for managers, supervisors, employees, and safety and health professionals
- compliance training requirement references
- instructor qualification
- training evaluation techniques

Systematic Approach to Training

A systems approach to training is necessary to ensure that training is job performance-based and cost-effective.

Note: Alternatives to traditional training methods are acceptable, as long as the approach produces the desired results.

The systematic approach comprises the following methodology and principles. Involving employees in all of these phases will result in a more effective training program—**Analyze, Design, Develop, Implement, Evaluate**.

Analyze the Job. Training needs are determined by needs, job, and task analyses.

- **Needs Analysis** is systematic evaluation accurately identifying the needs and requirements of the job, as well as the standards of performance necessary to properly and safely perform.

CHAPTER 14: TRAINING

- **Job Analysis** is determining specific tasks and associated levels of performance critical to conducting a job. These task items are the foundation to develop training elements, including OSH requirements.
- **Task Analysis** is the process of breaking down a task to determine the necessary knowledge and skills to do the job or identify what employees need to know to protect themselves. This information can be used to identify appropriate content for training programs.

Products that result from analysis include descriptions of training, deficiencies, and a list of tasks required for job performance. Once analysis is completed, program goals can be established and the scope of training content defined.

Design the Training. After a thorough analysis has been conducted, the second step is to focus on objectives development to meet job performance requirements. Learning objectives are based on results of the analysis phase of development and subsequently become the nucleus of the instructional process. Effective learning objectives are structured in a way that states the conditions, actions, and standards necessary to demonstrate when, what, and how well the trainee must perform. From this information, the basic sequence and structure, as well as preliminary test items can be developed. All of this information is then organized into the instructional units, which is the next phase of developing the material.

Develop the Material. All materials developed during this phase are based on the results of the design phase. Here, selection and development of appropriate instructional methods, including lesson plans and guides and training aids and materials are determined. Technical and instructional reviews should be incorporated during this phase with equal emphasis placed on learning objectives and design procedures. The instructor should select the most appropriate method of delivery to accomplish the desired transfer of knowledge and skills. Examples of different modes and methods of delivery are the following:

- **Orientation sessions** provide awareness and specific knowledge of requirements or jobs.
- **Formal training** consists of courses, programs, procedures, and job- and site-specific subjects.
- **Approved on-the-job training** is one-on-one training for approved training programs and skills-related activities where hands-on or sequential operations are to be performed.

Instructional materials should contain all necessary information and identified media to communicate learning objectives. They should contain sufficient procedural and content detail so that two instructors with similar background and training who use the same lesson plan would present essentially the same lesson content.

Specific products resulting from this phase include lesson plans, self-study materials, tests, on-the-job checklists, laboratory materials, evaluation materials, and course documentation materials.

CHAPTER 14: TRAINING

Implement the Plan. Implementation of a training program consists of all those activities required in actual preparation to either “pilot” or conduct the first class. The audience is identified with consideration given to who actually needs the training. This is an important consideration not only because of the cost incurred by doing unnecessary training, but also because “training for the sake of training” is not beneficial to the employer or the employee. Careful planning and thought must go into preparation for a “pilot” or first class. All materials, training aids, handouts, and audiovisual equipment, for example, must be identified and obtained. It is also essential that a subject-matter expert attend to assist with technical questions and issues that might arise.

Evaluate the Training. Evaluation provides critical feedback to ensure that training is accurate, appropriate to the needs, reflective of the job or requirements, and up to date. Evaluations from both students and supervisors provide excellent means of judging the merit or effectiveness of a training program. Such feedback can be used to improve the materials or even help the instructor focus on areas that might need emphasis. Feedback and evaluations are also excellent means to promote a feeling of pride and accomplishment among those associated with preparing and presenting the training program. The program content should be monitored continuously, and revisions made as a result of changes in policy, regulatory requirements, procedures, or commitments. Continual evaluation and “building” on a program will ensure continued improvement of the program and compliance with the original training requirements. Products of the evaluation phase include evaluation results, corrective actions taken, and updated or revised training materials.

Types of Training

The two basic types of training required for a successful OSH program are implementation and necessary and sufficient training on DOE Orders, OSHA standards, and other regulatory requirements.

It is important to note that *training* does not necessarily mean classroom training complete with lectures and tests. In many cases, alternatives to classroom training are more effective. These include on-the-job training, hands-on practice, and health and safety skills demonstration. Managers and supervisors should investigate such alternatives and the following:

- Providing a way for employees to “test out” of a class, such as giving them credit for passing a proficiency test in lieu of class attendance or for equivalent types of training.
- Developing meaningful ways of measuring employee mastery of the subject matter, such as observing and evaluating individuals while performing job tasks or noting improvements in injury and illness rates for a work group rather than, for example, a multiple-choice test.

Teaching Principles

Adults need an atmosphere that encourages use of their knowledge and experience. Therefore, instructors must act as facilitators who guide participants and encourage the learning process.

In *Managing Worker Safety and Health*, OSHA describes five basic principles that guide any informal or formal training program.

CHAPTER 14: TRAINING

- **Perceived purpose:** The initiation of any training program must focus on *why* the program is being conducted. Employees may be able to perform tasks proficiently but will resist doing them if they do not see the benefits.
- **Order of presentation:** Information should be logically organized. If employees are being taught to use a respirator, for example, the order of presentation should follow the sequence of selection, fit, wear, and maintenance.
- **Appropriate practice:** Employees should immediately be given the opportunity to practice and demonstrate new knowledge and skills. Hence, instruction is best given at the worksite.
- **Knowledge of results:** Provide immediate feedback. Praising safe work practices motivates employees to continue correctly performing tasks.
- **Allow for individual differences:** Successful training programs recognize that people learn differently and at different speeds, and therefore incorporate various training techniques, including hands-on instruction, audiovisual techniques, lectures, and written instruction.

Another effective way to learn is to teach others. After some initial instruction and practice, students can be paired into teacher/learner teams.

**One-on-one
Training**

This type of training is conducted as follows. A supervisor periodically watches an employee work, then meets with the employee to provide feedback. Observed safe work practices are encouraged, while additional instruction is provided to correct unsafe practices. Such training should be applied to *all* employees under the supervisor's direction, not just those with whom there appears to be a problem.

3. RECORDKEEPING SYSTEM FOR TRACKING EMPLOYEE TRAINING

Along with the increased emphasis on employee training by regulatory agencies, there has been a corresponding emphasis on company recordkeeping. Beyond the compliance issue, there are valuable uses for training records. Formal records may help an organization demonstrate the comprehensive nature of their training program. Training records may also help identify the strengths and weaknesses of the OSH program. Future training budgets can be developed by examining the effectiveness and costs of past training programs.

To ensure that new and existing employees receive appropriate training and additional instruction when required, adequate employee records must be maintained. If an employee is injured, accurate records may provide valuable information to the safety and health professional as to whether or not the element of training contributed to the cause of the incident.

CHAPTER 14: TRAINING

Training Records

Employee training records should be maintained. In certain cases, accident investigators and regulatory representatives may need to access these records.

Employee training records should include the following information:

- employee work history
- job descriptions and locations of work performed
- specific task performance (time and duration)
- training programs attended
- dates and costs of training
- location of training sessions (in-house/external)
- purpose of training (initial, refresher, remedial)

Additional information in the records may include the following:

- course title
- course objectives
- training methods (seminar, on-the-job training, home study)
- training aids or course materials used
- instructor (qualifications)
- methods of evaluation (written tests, performance)

4. SAFETY TRAINING REQUIREMENTS

The goal of an OSH training program is to provide a trained workforce to oversee and operate DOE facilities in a safe and healthful manner. OSH training can range from formal classroom training to simple one-on-one instruction between a worker and a supervisor.

General Safety Training

General OSH training is required for all DOE personnel, regardless of their classification. This general training should cover the FEOSH Program as outlined in 29 CFR Part 1960, Subpart H. This training must include DOE safety and health standards, Orders and policies; employee rights and responsibilities; procedures to report safety and health concerns, emergencies, and accidents; and policies concerning access to employee exposure monitoring data and medical records.

Top Management Officials must receive appropriate training to help them appreciate and actively support the organization's safety and health policies and programs. Training for management officials should emphasize their responsibilities.

- Communicate the organization's safety and health goals and objectives to all employees.
- Assign safety and health roles and responsibilities.
- Provide resources and authority to carry out assigned tasks.

CHAPTER 14: TRAINING

- Hold subordinate managers and supervisors accountable.
- Visibly support the safety and health program.
- Actively involve employees.

Additionally, management-level training should include a review of DOE local and field office policies on all relevant aspects of the OSH program and a comprehensive examination and analysis of the facility's OSH policies, goals, and objectives, as well as

- compliance procedures
- accident and injury reporting procedures
- investigation and inspection techniques
- DOE's planning and budget process elements that affect the OSH program
- program overview to control and manage hazardous materials
- hazard identification, evaluation, and control

Supervisors must be trained to analyze the work under their management, maintain OSH hazard controls, reinforce employee training, and motivate employees to follow safe work practices. Training for supervisors should occur within 3 months of their initial assignments, and refresher training should follow every 2 years. This training needs to be based on the supervisor's assigned duties and the existing and potential hazards associated with their area of responsibility.

Supervisory training should include:

- DOE and other applicable OSH standards
- methods for establishing and maintaining safe and healthful working conditions
- communication and listening skills
- techniques to train and motivate employees to comply with safe work practices
- methods of integrating OSH training and OSH performance
- accident investigation
- control and management of hazardous materials
- hazard identification, evaluation, and control

Training for supervisors is available from many sources. These sources include correspondence courses, in-house programs concerning site-specific work processes and hazards, and local college courses. Generally, the supervisor's training needs are best met with a combination of the above sources.

Employees must have proper training to safely, efficiently, and effectively perform their jobs.

CHAPTER 14: TRAINING

Comprehensive employee safety and health training includes:

- information on the agency's OSH program
- employee rights and responsibilities
- job-specific training on existing and potential hazards
- hazard identification and associated emergency actions
- hazard prevention
- employee certification or qualification for certain job assignments

Employee OSH training must occur when the following conditions exist:

- Employees are hired or reassigned.
- New equipment or processes are introduced.
- Procedures are revised or updated.
- Employee performance needs improvement.
- Employee interest in safety and efficiency needs a boost.

**Individual
Development
Plan**

Safety and Occupational Health Professionals. Individuals are qualified by Office of Personnel Management standards for series and grade. Individual Development Plans (IDPs) can be useful in customizing skills to local work activities and are not restricted to safety and health personnel. The scope of the IDP will vary depending on what knowledge and skills the employee currently possesses and what safety and health work they will be performing. An IDP is most crucial when an employee enters into positions using modified qualifications. The IDP should be developed jointly by the supervisor and employee. The OSH professional's current knowledge and skills should be reviewed. A training forecast and plan should be developed to enhance required knowledge and skills for the employee to be more effective in performing his or her duties.

Formal training is needed in hazard recognition and control, safety and health evaluation, techniques and procedures, and application of standards. In addition to this minimal training, involvement with professional safety and health organizations is advisable. Professional certification and licensing training may be included on the IDP.

Many community organizations (such as hospitals, fire departments, and community colleges) offer development opportunities from which safety and health professionals can benefit. In addition to training classes and certification, there are other subjects relating to management and interpersonal skills that can greatly enhance the effectiveness of the safety and health professional. These subjects should also be included in the IDP.

Involvement in professional organizations and trade shows is helpful in keeping safety and health professionals up to date on industry changes.

The latest sources of information are electronically accessible through a vast number of data bases targeting safety and health concerns.

The following professional organizations provide electronic resources:

CHAPTER 14: TRAINING

- American Conference of Governmental Industrial Hygienists
- American Industrial Hygiene Association
- American Society of Safety Engineers
- American Public Health Association
- National Safety Council
- National Environmental Training Association

5. PROFESSIONAL QUALIFICATION AND CERTIFICATION

In addition to training and networking through the above organizations, professional certification is also desired and appropriate for OSH professionals. The Board of Certified Safety Professionals (BCSP) at Savoy, Illinois, administers the certifications for safety professionals, OSH technologists, and construction health and safety technicians. The following table describes the specific qualifications, process, and certification necessary for each category.

CHAPTER 14: TRAINING

TABLE 1: PROFESSIONAL CERTIFICATIONS

	Qualifications	Process	Certification
Certified Safety Professional (CSP)	<ul style="list-style-type: none"> Applicant must be of good moral character and high ethical standards A baccalaureate degree in safety from an accredited safety degree program or equivalent experience or a combination of experience and education. Four years of professional safety experience. Passing scores on the required examination. Meeting recertification requirements. 	The CSP examination process requires a broad spectrum of professional knowledge in the field of safety as measured by the Safety Fundamentals Examination, but allows for some degree of specialization through the Specialty Examinations taken after passing the Safety Fundamentals. For the generalists, certification in Comprehensive Practice is also available. Examination are available through the BCSP by calling (217) 359-9263. The Spring exam deadline is January 10. The Fall exam deadline is June 1.	All CSPs are required to meet continuation of certification requirements every 5 years and pay an annual renewal fee.
Occupational Safety and Health Technologist (OSHT)	<ul style="list-style-type: none"> Applicant must be of good moral character and high ethical standards. Applicants must demonstrate 5 years of experience in OSH activities acceptable to the Joint Committee, subsequent to receipt of a high school diploma, and must pass a 7-hour examination. At least 35 percent of the applicant's time must have been spent in the OSH field during the periods claimed for credit. An associate degree from an accredited institution in safety and health or other technical and scientific discipline, or a baccalaureate degree from an accredited institution may be accepted by the Joint Committee as specified in the examination application. <p>Note: (1) Applicants with an Associate or Baccalaureate Degree in industrial hygiene, occupational health, occupational safety, industrial safety, or environmental sciences may sit for the examination before meeting all the experience requirements for certification. (2) Applicants with 2 years of acceptable experience or a combination of experience and education equal to 2 years may also sit for the exam before meeting the experience requirements for certification. Certification in these cases is awarded after the examination is successfully completed and the applicant has attained the full 5 years or equivalent of acceptable experience.</p>	The OSHT examination process is held concurrent with the BCSP and the American Board of Industrial Hygiene (ABIH) examinations, which are held in the Spring at the American Industrial Hygiene Conference and regionally in the fall. The Spring exam deadline is January 10. The Fall exam deadline is June 1.	All OSHTs are required to meet certification maintenance requirements every 5 years and pay an annual renewal fee.

CHAPTER 14: TRAINING

	Qualifications	Process	Certification
Construction Health and Safety Technician (CHST)	<ul style="list-style-type: none"> Applicant must be of good moral character and high ethical standards. Applicant must have a high school diploma and be qualified as an OSHA authorized instructor for the OSHA Construction Safety and Health course (10 and 30 hour) or have an associate degree or higher in safety and health, or have at least 9 semester hours (or equivalent quarter hours) of college courses in safety and health. Must have 3 years of work experience in construction and 3 years of work experience as a construction foreman, first-line supervisor, job superintendent, or manager or have 2 years of work experience where at least 35 percent of job duties involved safety and health. <i>Substitutions:</i> An associate degree or higher in safety or industrial hygiene may be substituted for 2 years of work experience in construction, or completion of 12 semester hours (or equivalent quarter hours) of college safety and health courses may be substituted for 1 year of work experience. 	The CHST examination is given at approximately 70 locations throughout the United States, often in conjunction with safety and health conferences. Known candidates are advised of the examination dates by the ABIH/BCSP Joint Committee after their applications have been approved. Contact the BCSP at (217) 359-9263 for more information. The Spring exam deadline is January 10. The Fall exam deadline is June 1.	Currently there are no continuing certification requirements other than renewal by paying applicable recertification fees.
Fire Protection Engineer (Membership)	<ul style="list-style-type: none"> Graduate of an engineering curriculum of accepted standing. Completed no less than 4 years of engineering practice, 3 of which were in charge of fire protection engineering work. Or, if not a graduate, shall demonstrate a knowledge of the principles of engineering and have completed no less than 6 years of engineering practice, 3 of which shall have been in charge of fire protection engineering work. <p>Further information on certification and membership in fire protection engineering can be obtained from the Society of Fire Protection Engineers at (617) 482-0886 or writing to 80 Buttermarch Street, Boston, MA 02110.</p>		

CHAPTER 14: TRAINING

	Qualifications	Process	Certification
Certified Industrial Hygienist (CIH)	<p>ABIH has two categories of certification—Certified Industrial Hygienist (CIH) and Industrial Hygienist in Training (IHIT). The CIH recognizes special education, long experience, and proven professional ability in the comprehensive practice or chemical practice of industrial hygiene. The IHIT recognizes special education in and knowledge of the basic principles of industrial hygiene.</p> <p>Minimum eligibility requirements for admission to examinations include the following:</p> <ul style="list-style-type: none"> • Good moral character and high ethical and professional standing. • Graduation from a college or university acceptable to the ABIH with a Bachelors Degree in industrial hygiene; chemistry; physics; chemical, mechanical, or sanitary engineering; or biology. • One year of full-time employment in the professional practice of industrial hygiene acceptable to the ABIH and subsequent to the completion of an acceptable Bachelor's Degree is required for Core Examination eligibility. Five years of full-time employment in the professional practice of industrial hygiene, acceptable to the ABIH and subsequent to the completion of an acceptable Bachelor's Degree is required to be eligible for the Comprehensive Practice or Chemical Practice Examination. <p>An applicant must be in the full-time practice of industrial hygiene at the time the application is submitted. In addition, a minimum of two professional references must be provided.</p>	<p>New applicants must complete the application form, which may be obtained from the ABIH/BCSP Joint Committee in Savoy, Illinois, at (217) 359-2686. The application must be accompanied by the required application fee. The applicant must provide a concise description and inclusive dates for each industrial hygiene employment period which is claimed for professional experience credit. An application and all required documentation must be postmarked no later than February 1, immediately preceding the Spring examination, and no later than June 1, immediately preceding the Fall examinations.</p>	<p>The CIH certificate is granted for a 6-year period. Continued certification is dependent on specific maintenance requirements and a renewal fee.</p>
Advanced Safety Certificate		<p>An Advanced Safety Certificate is available through the University of Phoenix, 5251 Green Street, (500W), Salt Lake City, UT 84107. It is sponsored by Utah Safety Council at (801) 262-5400.</p>	

APPENDIX 14-1

SOURCES OF TRAINING

Training may be obtained from either DOE-sponsored or outside training sources. The main consideration is that it is adequate.

DOE-Sponsored Training

Idaho National Engineering Laboratories (INEL), Idaho Falls, Idaho. Contact: Marcia Pratt at (208) 526-1357. The following workshops are provided through INEL for DOE.

- Accident Investigation Workshop, 7.5 days, continuing education units (CEUs): 5.3. This workshop is a series of lectures and lab exercises to certify the participant as a DOE-trained accident investigator. The class includes accident investigation methods such as interviewing witnesses, gathering facts, and developing judgments of need. Analytical techniques presented include barrier analysis, change analysis, events and causal factors analysis, Management Oversight and Risk Tree Assessment, and root cause analysis. Legal concerns, photography, management closeout, and accident report writing are all discussed. Participants conduct a mock accident investigation complete with a written and oral report.
- Accident Investigation Refresher, 3 days, CEUs: 1.3. Designed to follow the Accident Investigation Workshop to maintain DOE certification. The workshop is required every 3 years following initial training or 4 years from the most recent certification if a person serves on a Type A or B investigation.
- Accident Investigation Chairperson Workshop, 2 days, CEUs: x. Chairperson workshop is available for those eligible to serve as chairperson on Type A or B investigations.
- Readiness Team Workshop, 1 day, CEUs: x. The Readiness Team Workshop is designed to provide field office personnel training in how to begin an investigation once an accident occurs and what immediate actions are necessary in preserving and controlling evidence. It includes securing the accident scene, securing records and hardware, obtaining witness statements, obtaining photographs, and ensuring that drug screens and other medical exams are completed. It also includes interaction of Readiness Teams and the Accident Investigation Board.
- Safety and Health Orientation, 4 hours. DOE's Office of Occupational Safety and Health Policy and Office of Human Resources and Administration developed a course for new and current DOE employees and supervisors interested in learning more about the Federal Employee Occupational Safety and Health (FEOSH) Program.

Individuals attending this orientation class will learn:

- elements of the Departmental FEOSH Program
- regulatory criteria supporting the FEOSH Program
- safety and health rights and responsibilities as Federal employees
- correct reporting of employee safety and health concerns
- methods to recognize and prevent common health and safety hazards

If you would like more information about this course or how to bring it to your location, please call the FEOSH Program Office at (301) 903-3638.

APPENDIX 14-1

Training Available Outside DOE

The following training sources available *outside* DOE offer nationally recognized classes in Safety and Health and related subjects.

U.S. Department of Labor

OSHA Training Institute
1555 Times Drive
Des Plaines, IL 60018
(708) 297-4810

The following Institutes/Colleges have received grants from OSHA and also teach OSHA-sanctioned training.

Georgia Tech Research Institute

Environmental Science and Technology Lab
151 Sixth Street
Atlanta, GA 30332
1-800-653-3629

Keene State College

University Center
400 Commercial Road
Manchester, NH 03101
1-800-449-6742

Maple Woods Community College

Division of Continuing Education
2601 N.E. Barry Road
Kansas City, MO 64156
1-800-841-7158

Niagara County Community College

Department of Corporate Training
160 Washburn Street
Lockport, NY 14095
1-800-280-6742

Red Rocks Community College

Trinidad State Junior College
13300 West Sixth Avenue
Lakewood, CO 80401
1-800-933-8394

Texas Engineering Ext. Service

The Texas A&M University System
300 West Arbrook
Arlington, TX 76014
1-800-723-3811

University of California, San Diego

15373 Innovation Drive
San Diego, CA 92128
1-800-358-9206

West Virginia University

National Resource Center for Construction Safety & Health
P. O. Box 6615
Morgantown, WV 26505
1-800-626-4748

National Institute for Occupational Safety and Health (NIOSH)

4676 Columbia Parkway
Cincinnati, OH 45226
(513) 533-8225

NIOSH developed a program to establish OSH learning centers throughout the United States. These educational resource centers are located within 27 universities, serving all ten Department of Health and Human Services Regions. Contact the above number for a course schedule.

American Society of Safety Engineers

Department of Education
1800 E Oakton Street
Des Plaines, IL 60018-2187
(708) 692-4121 Ext. 14, 61 and 707

National Safety Council—Safety Training Institute Regional Offices

Central Region
1121 Spring Lake Drive
Itasca, IL 60143-3201
1-800-621-7615 Ext. 2356

Mid Atlantic Region
3212 Cutshaw Avenue, Suite 320
Richmond, VA 23230-5018
1-800-633-2208

Northeastern Region
251 Salina Meadows Pkwy, Suite 270
Syracuse, NY 13212-4501
1-800-432-5251

Southeastern Region
3300 NE Expressway, Suite 7A
Atlanta, GA 30341-3941
1-800-441-5103

Western Region
303 Twin Dolphin Drive, Suite 520
Redwood City, CA 94065-1409
1-800-544-1030 Ext. 101

APPENDIX 14-1

Training Resources and Data Exchange (TRADE)

DOE's Training Resources and Data Exchange (TRADE) is a valuable source of information about existing training courses and help for those conducting classes. For example, one of TRADE's most popular products, *The Occasional Trainer's Handbook*, has been published in the private sector by Educational Technology Publications, Inc. The handbook is available to the DOE community at no charge and includes sections on analysis, design, development, implementation and evaluation of training. Other available TRADE publications include the following.

1. Advanced Training Technology Resource Guide
2. A Guide to Computer-Based Training
3. Directory of DOE and Contractor Training and Development Personnel
4. Hazard Communication Requirements, A Primer for Trainers
5. Instructional Materials for SARA/OSHA Training
6. Job Task Analysis/Guide to Good Practice
7. Training Implications of Selected DOE Orders

The TRADE Training Resources Catalog currently lists more than 1100 training courses. The catalog and other items of interest, such as upcoming TRADE meetings, committee members, and publications are available electronically at (800) 569-7743.